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The Educational Development
of the Marine Corps
Supply System

Thesis by
Thad A. Hoyer
Capt. USMC.

Thesis
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U. S. Naval Postgraduate School
Monterey, California

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THE EDUCATIONAL DEVELOPMENT
OF THE U.S. MARINE CORPS
SUPPLY SYSTEM

By

Thad A. Hoyer

//

Bachelor of Science

Clarion State College, 1955

A Thesis Submitted to the School of Government,
Business and International Affairs of The
George Washington University in Partial
Fulfillment of the Requirements for
the Degree of Masters in
Business Administration

April 26, 1965

Thesis directed by

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PREFACE

With a military occupational speciality in supply and a civilian background in education, the author found it quite perplexing, in 1959, when he first joined the Marine Corps Supply System, that such a complex system must be so dependent on hit or miss, on-the-job training as its primary means of qualifying the enlisted personnel manning the system.

As time went on, and the educational quality of personnel being assigned to my supply section did not improve, certain troubling questions came to mind such as:

1. How long has this situation existed?
2. Is this a temporary situation due to the system's rapid progress in automation?
3. What is being done about the educational aspects of the system?
4. If we are still this far behind in our educational philosophy, what will be our plight in the future?
5. What has been the general Marine Corps philosophy concerning formal supply education?
6. What can and must be done to alleviate this educational void in the system?

I have sought to combine the research guidance offered by my thesis director with my own personal experiences in search

of answers to the foregoing questions. The result appears in the following chapters.

In the belief that events of the past often reveal the future, the author considers the historical approach most appropriate for this paper. Accordingly, what follows is a study of the educational evolution of the Marine Corps Supply System. It is hoped that the information presented will serve as an aid in the formulation of present and future Supply System educational policies and trends.

The scope of the thesis has been limited to the general supply area and therefore excludes aviation, subsistence, and the retail exchange system.

A note of thanks is in order for the "open door" policy offered by various offices at Headquarters Marine Corps, as well as to my wife, Barbara, without whose typing effort this particular study would not have been possible.

TABLE OF CONTENTS

	Page
PREFACE	ii
LIST OF ILLUSTRATIONS	vi
 Chapter	
I. EARLY SUPPLY EDUCATION AND ORGANIZATION, 1798--1900	1
Early Marine Corps Educational Philosophy System and Educational Requirements, 1798--1857 System Changes and Education, 1857--1897 Summary	
II. SUPPLY SYSTEM EDUCATION AND ORGANIZATION, 1900--1940	11
General Marine Corps Education Supply System Organization and Education Demands Summary	
III. SUPPLY SYSTEM AND SUPPORTING EDUCATION, 1940--1946	22
Overall Marine Corps Educational Results Commodity System of Supplies Education and the Commodity Supply System Summary	
IV. SUPPLY SYSTEM AND SUPPORTING EDUCATION, 1946--1956	28
Commodity Supply System Evaluation Summary	
V. THE CHANGING SUPPLY SYSTEM, 1956--1965	37
Supply Department Pressures Commandant of the Marine Corps Pressures Department of Defense Pressures Educational Response An Example of System Response Summary	

VI. A LOOK INTO THE FUTURE	58
The Supply System of Tomorrow	
Summary	
VII. CONCLUSIONS	70
BIBLIOGRAPHY	73

LIST OF ILLUSTRATIONS

Figure	Page
1. Commodity Supply Distribution System25
2. Inventory Control Point Distribution System48
3. Marine Corps Unified Material Management System60
4. Computerized Programed Instruction68

CHAPTER I

EARLY SUPPLY EDUCATION AND ORGANIZATION, 1798--1900

This chapter traces the development of Marine Corps Supply from its inception in 1798 to the end of the Nineteenth Century. It shows how the supply function of the Marine Corps grew from an additional duty of the first Commandant of the Marine Corps, through the creation of the Quartermaster Department when an assistant quartermaster was appointed, to the establishment of a depot system of supplies with eight warehouses extending from Philadelphia, Pennsylvania to the shores of Haiti and the Philippine Islands.

Since the success of an organization is directly related to the quality of personnel making up that system, the contributions of certain personalities who recognized the system needs and shortcomings and created the basic supply system are studied.

As for specific educational developments to meet the requirements of the system during its first century, the record shows little in the area of formal efforts. In those early days, only the glory of battle and those functions contributing to the success or failure of battle, such as "The School of Application," were recorded in detail.

Early Marine Corps Educational Philosophy

During the early years of the Marine Corps, there was little need for a formal or systematic program of education. In 1812, Colonel Archibald Henderson and other officers held brief periods of instruction by giving fatherly advice to junior officers and men prior to sending them to sea for duty. The most used school of instruction during this period was "the school of hard knocks."¹

This condition prevailed until 1891, when in May of that year, Marine Corps General Order Number One was published. This order provided for a course of study paralleling promotion examinations. In compliance with General Order Number One, Captain D. Pratt Mannix opened the first officer school in the Marine Corps, the "School of Application." This school, located at Marine Barracks, Washington, D.C. taught such subjects as military law; infantry fire; manual for field engineering; military topography and sketching; service of security and information; naval gunnery; small arms firing regulations; drill regulations; infantry and artillery; and naval signal and telegraph code.²

In general, the philosophy of the Marine Corps toward

¹C.H. Metcalf, "A History of the Education of Marine Officers," The Marine Corps Gazette, XX, (May, 1936), 15.

²Ibid., 17.

formal education during the period of 1798 to 1900, was best described by Colonel R.H. Dunlap when he stated:

. . . In the days past, the serious study of our profession except drill was not considered too important. . . then it was also true, of those days, that too much education was somewhat frowned upon. If a man were a "High Brow," so called, his brothers rated him as "impracticable." . . . It¹ was the "Practical Soldier" that ruled the promotion board.

During these early years of the Marine Corps, such an educational philosophy could safely prevail as the Marine Corps was still quite simple in organization. When Congress authorized the Marine Corps on July 11, 1798, it provided for:

. . . a corps of Marines which shall consist of one major, four captains, sixteen first lieutenants, twelve second lieutenants, forty-eight sergeants, forty-eight corporals, thirty-two drums and fifes, and seven hundred twenty privates . . .²

On July 12, 1798, William Ward Burrows was appointed major and first commandant of the newly authorized Marine Corps. Along with his primary duty as Commandant, he also assumed additional duties as the first quartermaster and paymaster.³

¹R.H. Dunlap, "Education in the Marine Corps," The Marine Corps Gazette, X (December, 1925), 149.

²U.S. Department of Navy, Quasi-War with France: Operations Feb., 1797-Oct., 1798, U.S. Government Printing Office, 1935, 188.

³C.R. Sanderson, "The Quartermaster's Department; its Mission and History," The Marine Corps Gazette, XV (March, 1930), 62.

System and Educational
Requirements, 1798--1857

In performing his additional duties as quartermaster and paymaster, Major Burrows created the first simple supply system within the Marine Corps.

From funds appropriated by Congress, Major Burrows administered an allotment. The majority of the funds in this allotment were disbursed directly to the individual Marine in the form of pay, and as a subsistence allowance in order to purchase his own food. Other supplies and materiel, such as clothing and ammunition, were purchased by the Marine Corps and issued to the individual Marine, with Major Burrows paying all such bills for the Marine Corps.¹

During this period, the individual initiative and basic common sense of the man filling the quartermaster and paymaster functions were the primary educational requirements of the Supply System.

Section two of the act which established the Marine Corps also provided for growth in specialized areas of the Marine Corps. This section in part stated:

. . . and shall it become necessary to appoint an adjutant, paymaster, quartermaster, sergeant-major, quartermaster-sergeant, and drum and fife major, or any of them, the major or commandant of the Corps, is hereby authorized to appoint such staff officer or officers from the line. . . ²

¹Ibid., 62.

²U.S. Department of Navy, op. cit., 188

When staff officers were finally appointed, Second Lieutenant Thomas Wharton was detailed from the line on January 22, 1799, to act as the first quartermaster of the Marine Corps.¹

During this period, responsibility for subsistence of the Marine Corps was placed under the quartermaster. In carrying out this function, Lieutenant Wharton established the first system of contract procurement in the Marine Corps. Contracts were made with farmers in the Philadelphia area to provide food to meet Marine Corps needs. However, the first such contracts did not prove too satisfactory; the farmers were not required to provide a variety of food, consequently, the same menu was often served daily.

Once again the only training required to fill the position of quartermaster of the Marine Corps was self-education, individual initiative, and a trial and error approach to problem solving.

One major problem encountered by this detail method of assigning the quartermaster from the line was that of periodic changes of the quartermaster. Since this position was a temporary assignment, the continuity required for the quartermaster operation did not exist. Therefore, the experience gained by trial and error, on-the-job training was often not passed on to the new quartermaster. Thus, many repetitive problems encountered by the quartermaster were never wholly solved.

¹Sanderson, op. cit., 62.

The year 1834 saw the establishment of the quartermaster department of the Marine Corps. This came about when an assistant quartermaster was assigned to aid in the expanding supply function of the Marine Corps. Along with this, the quartermaster and assistant quartermaster appointments were made permanent. Those officers appointed maintained their linear rank for promotion purposes. This action was the first recognition by the Marine Corps of the need to maintain continuity and professional experience within the supply function. This condition continued until 1847 when once again the quartermaster assignment was relegated to its previous role as a staff position.¹

During this period, the education and training given to Marines within the quartermaster department consisted of on-the-job training under the basic philosophy of:

. . . stick to the letter of the law in all dealings. In cases of doubt, he should ask questions and consult officers of longer service whose advice and suggestions will be beneficial.²

In the first fifty-nine years of Marine Corps history most supplies were either purchased in local markets by the quartermaster or manufactured as the need arose. However, as the personnel complement increased from the original authorized 881 officers and men to a strength of approximately 2000 by 1857, the method of making Marine uniforms to individual measurement

¹Ibid., 63.

²Ibid., 68.

became unsatisfactory. Piecemeal ordering was too slow in meeting the requirements for outfitting and providing the needs of Marine Expeditionary Forces.

This situation was described by Colonel R.H. Dunlap in his statement:

Early expeditions which have never developed into actual conflict were often ill prepared, poorly organized and equipped, and have depended too much on Marine's luck for a successful conclusion.¹

System Changes and Education, 1857--1897

In order to meet the growing supply demands of these expeditionary forces, the depot system concept of supplies was established. This concept provided for a central depot or storehouse to be located at Philadelphia, Pennsylvania. This depot was staffed by one captain, one sergeant clerk, and five privates, who had the primary function of contracting, providing materiel, and writing specifications for the commercial manufacture of uniforms.²

Contracts were negotiated and granted to various clothing manufacturers in the Philadelphia area. Once the uniforms were completed, they were immediately issued or placed in stock for future requirements. This system of contract manufacturing provided for the building of stocks of various size uniform items and aided in meeting the immediate requirements of expeditionary forces.

¹Dunlap, op. cit., 151.

²Sanderson, op. cit., 64.

In 1879, this concept was further refined, when the depot began to purchase materiel and cut its own patterns to various sizes. Women sewed the uniforms under contract for the depot and returned the completed item within a week. By following this new method, the depot was able to increase its ability to accumulate a large stock of varied size uniforms.

Throughout this period, the success of the depot concept of central supply contracting, warehousing, and issuing depended entirely upon the individual initiative of the personnel assigned to the depot.

This centralized depot concept proved satisfactory. Thus, in 1897, Brigadier General Charles L. McCawley, the Quartermaster General, revised the system of procurement of rations by centralizing control in the purchase of food items.

Non-perishable items such as flour, sugar, and canned goods were centrally procured by the quartermaster department at the Philadelphia Depot and further shipped for storage in subsistence supply depots located at Philadelphia, Pennsylvania; Quantico and Hampton Roads, Virginia; Parris Island, South Carolina; and San Francisco, California; Port-au-Prince, Haiti; Guam, and Cavite, Philippine Islands. All posts and stations adjacent to these supply depots obtained their non-perishable food requirements by submitting requisitions directly to the depot.¹

¹Ibid., 63.

By utilizing the advantage of depot storage and centralized procurement of non-perishable food, General McCawley was able to take advantage of market conditions to buy, thus effecting savings on the purchase of food for the Marine Corps.¹

General McCawley later authorized decentralization for the procurement of perishable food items by all depots. However, contracts for such items could only be let to the lowest bidder after a period of contract advertising. This contract method, as with the centralized procurement, also effected savings for the Marine Corps.

The depot system of storing supplies in warehouses throughout the country had many advantages to the Marine Corps. However, certain disadvantages also resulted: there was no way of knowing the exact location or amount of many stored items of supply.

Even with centralized procurement, the control of distribution broke down. When orders were received to outfit an expeditionary force at a depot other than Philadelphia, depot commanders were required to rush around to storehouses, navy yards, and throughout the country in search of equipment.²

Many of the supply support problems of this period were attributed to the lack of central control and training at the

¹Ibid., 63.

²J.H. Craige, "Brigadier General Cyrus S. Radford, USMC," The Marine Corps Gazette, XIV (September, 1929), 151.

various depots. Depot commanders, in areas other than Philadelphia, were not familiar with the supply system or trained in the early art of supply as were the on-the-job, self-trained personnel at the Philadelphia Depot.

Summary

The supply system during this period was subject to many "growing pains." As with any new organization, the road is not always smooth or the direction known in the early stages. However, the first century in the existence of the new Marine Corps did see a gradual evolution in both organizational size and logistics complexity. To meet this growth, it cannot be stated that any startlingly new concepts were developed. However, the foundation of a supply structure was laid that met the Marine Corps requirements of the day both inside and outside the United States and kept the men of the Marine Corps clothed, fed, and paid.

CHAPTER II

SUPPLY SYSTEM EDUCATION AND ORGANIZATION, 1900--1940

This chapter develops the evolution of the Marine Corps Supply System, through its first major test of responsiveness under war-time crises and demands. In developing this section, the educational position and condition of the Marine Corps Supply System is compared, with the general Marine Corps educational philosophy of the time, and its support of formal supply education.

General Marine Corps Education

The 1891 officer School of Application, having proven itself as an aid in preparing for promotion examinations, was moved to Norfolk, Virginia in 1909. In 1919 the school again moved, this time to Quantico, Virginia, where its name was changed to "Marine Officers Infantry School." As the name implies, basic infantry tactics learned from the experiences of World War I were taught.¹

As the Marine Corps progressed, and its role in the defense posture of the United States became greater, the role of

¹C.H. Metcalf, "A History of the Education of Marine Officers," The Marine Corps Gazette, XX (May, 1936), 16.

formal education for other than promotional purposes was realized. By 1936, The Marine Corps Schools, located at Quantico, Virginia, was established. Their role in developing the formal educational program of the Marine Corps was to be progressive; teach subjects that would suit the needs of individuals who comprise the various inter-related groups of the Marine Corps; be practical in their educational concepts; and be able to serve the Marine Corps as a whole.¹

In order to carry out this educational role, levels of formal course instruction were established: (1) The Basic Course provided newly commissioned second lieutenants with formal instruction in administration; navy law; drill and command; topography; and weapons and tactics; (2) The Junior Course provided junior captains and senior lieutenants with instruction in the war-time duties of company and battalion commanders; and (3) The Senior Course provided instruction on brigade and Fleet Marine Force operations for field grade officers.²

Captain A.T. Mason described the need for these officer courses in his statement:

These progressive steps in professional advancement perform the important function of keeping officers abreast of rapidly changing modern developments as well as providing instruction in the more advanced phases of military science.³

¹A.T. Mason, "The Role of the Marine Corps Schools," The Marine Corps Gazette, XX (May, 1936), 9.

²Ibid.

³Ibid., 61.

In addition to formal instruction, Marine Corps Schools offered correspondence refresher courses in tactics and related subjects designed to fill the seven to ten year educational void of officers between assignments to formal instruction.

For the recognized specialist functions of the Marine Corps, such as aviation, communications, engineering, radio and foreign language, post graduate instruction was offered starting in 1934 and projected through 1937.¹

In evaluating the role of formal education for officers in the Marine Corps, Major C.H. Metcalf stated:

Formal education for officers in military science prior to the world war substantially helped those officers during the crucial test of their ability on the battlefield. . . . With the present rapid growth in the complicated structure of our civilization, and the growing more and more complicated of the arts of tactics and strategy, it is apparent that we must think and study more about these matters or we cannot keep pace with such rapid changes. "Practical," or rather uneducated soldiering, would appear to have little place in future wars.²

For the enlisted man in the Marine Corps, the outlook for formal education was not as bright. Prior to 1939, the Marine Corps had been selecting a certain number of enlisted men monthly for specialized training at service schools of their choice. However, on-the-job training under the supervision of an experienced staff non-commissioned officer and/or a formal

¹"Note," The Marine Corps Gazette, XVIII, November, 1934, p. 43.

²Metcalf, op. cit., 54.

school trained officer was considered as the primary method of training enlisted personnel.¹

Supply System Organization
and Educational Demands

In 1903, after being assigned as assistant quartermaster, Colonel Cyrus S. Radford went to his post at the Philadelphia Supply Depot with one objective in mind: to create a business organization at the Philadelphia Depot capable of supplying promptly and acceptably all of the items needed by the Marine Corps. Since the demands on the Marine Corps had increased, this objective was quite an undertaking. Daily requests for expeditionary forces of Marines were reaching Washington due to expanding American interests all over the world. From 1898 to 1903 at least one and as many as six Marine expeditions were sent out each year. Predictably this type of activity placed great strains on the Supply System.²

By 1904 Colonel Radford was able to begin construction on a new supply depot at Philadelphia; by 1909 this depot was manufacturing practically all of the equipment and clothing used by the Marine Corps.

The farsightedness of Colonel Radford, and his quartermaster depot concept of manufacturing all Marine Corps supplies, placed the Marine Corps Supply System in a responsive

¹Ben F. Wilson, "Marine Corps Service Schools," The Marine Corps Gazette, XXII (June, 1939), 13.

²Craige, op. cit., 151.

position to meet the increased demands of World War I. The depot was organized to expand each manufacturing division in order to keep pace with suddenly increased supply demands. Thus, the Marine Corps personnel increase to 75,000 men during World War I was promptly supplied and equipped by the fourteen officers, one hundred enlisted men, four hundred twenty civilian men, and five hundred ninety-three civilian women who made up the depot complement.¹

Through their efforts, thirty-six expeditionary units which sailed for service in France and the West Indies were completely equipped. By the end of the war, the depot had processed thirty-one million pounds of supplies and equipment in support of the Marine Corps effort in the war.²

The motto established by the depot of supplies was:

Do it now! There are no pending hooks of baskets.³
Every effort will be made to make prompt delivery.³

This motto was supported during the war. Headquarters Marine Corps would only have to telegraph to the depot the size of the organization, where it was to perform service (tropics, arctic or temperate zone), and send a transport up the Delaware River to pick up the supplies and materiel at the Depot. Delivery was ready within twenty-four hours of receipt of the message.

By 1929 the Marine Corps was back to a peacetime complement and routine and was able to evaluate the success of

¹H.P. Atherton, "Where Marine Equipment Comes From," The Marine Corps Gazette, VIII (December, 1923), 235.

²Sanderson, op. cit., 65.

³Atherton, op. cit., 240.

the quartermaster depot concept of the now, Brigadier General Radford. This evaluation pointed out such facts as: (1) The Depot at Philadelphia was one of the largest merchandising establishments in the nation; (2) The depot maintained a large enough inventory of stores to outfit any size expedition complete to the last detail within twenty-four hours; (3) Everything the Marine Corps used in barracks, camp or field except certain vehicles, firearms, and ammunition bore the depot trademark and was made on the premises; (4) No other military corps in the world enjoyed the benefits of a similar supply unit; (5) The first system of unified supply was firmly established in the Marine Corps; and (6) So unique was the system, that it became the forerunner of many of the merchandising and mail order houses of the country.¹

Not only were the depots praised for their contribution to the war effort, but the quartermaster department as a whole also gained recognition throughout the Marine Corps for the support rendered during the war. One such comment concerning this support was made by Lieutenant Colonel Sanderson, who stated that the quartermaster department as well as the quartermaster depot system of supplies enabled the Marine Corps to:

. . . build up the high reputation for mobility and efficiency it enjoys. Everything Marines use in war and peace from tooth picks to machine guns is supplied from this source.²

¹Craige, op. cit., 151.

²Sanderson, op. cit., 150.

The Marine Corps knew that the quartermaster department was organized solely for rendering service to the line; in so doing it was able to build a smooth working structure capable of operating to meet supply requirements under any conditions.

One of the important new conditions facing the quartermaster department in the mid 1930's was economy. The spending of World War I had been over for some twelve years, and Congress began cutting funds. With the task of stretching the dollar, the quartermaster department followed the concept that, "Small extravagances lead to large deficits."¹

In trying to economize, the Marine Corps cut back to three supply depots: Philadelphia, the largest and maintaining seventy-five percent of all supplies; Norfolk, maintaining supplies for ships detachments; and San Francisco with a depot annex at Barstow to service the West Coast responsibilities of the Marine Corps.² Along with this depot cutback the quartermaster department maintained close relations with the Army and joined them in a centralized system of supply procurement. This relation with a sister service enabled the Marine Corps to effect many dollar savings and can be considered as the first step toward the single service concept of supplies.

¹Ibid., 67.

²J.A. Furer, Administration of the Navy Department in World War II, (Washington: Department of the Navy, 1959), p. 594.

Supporting Supply System Education

Marine Corps sponsored formal supply education for officers during this period was non-existent. Had it not been for such men as Colonel Radford who diligently pursued self-education in the specialist fields of manufacturing, merchandising, warehousing, and financing, the Marine Corps Supply System would not have been as responsive in its support to the Marine Corps efforts in World War I.¹

To add to the problems of maintaining continuity and a central nucleus of trained officers within the Supply System, was the "Act of August 29, 1916." This Act consolidated the staff functions with the line function for promotional purposes and did away with the permanent detailing of officers to staff positions. It further provided that staff officers on duty at the time of the Act would be permitted to hold their staff rank, but new permanent appointments would not be made. As a result, it became necessary to detail line officers to four-year tours in supply to fill the vacancies created within the Supply System.²

Enlisted personnel of the supply system had the benefit of learning through on-the-job training, under the supervision of such officers as Colonel Radford. Also, a limited schooling in clerical functions given at locally sponsored personnel administration schools was available to enlisted supply personnel.

¹Craige, op. cit., 151.

²Sanderson, op. cit., 63.

The effects of this insufficient formal school training were felt during World War I.

At the beginning of the war there was a shortage of trained quartermaster sergeants. This shortage was the result of trained sergeants being commissioned, without adequate school-trained replacements coming along to fill the openings created. To counteract this shortage, a school for quartermaster sergeants was opened at Norfolk, Virginia.

This temporary school at Norfolk, through lecture and practical application, offered instruction on the clerical and practical duties required of a quartermaster sergeant. Such subjects as expeditionary service, handling native labor, experiences relating to the purchase, care and transportation of supplies, detailed supply record keeping, official correspondence, typing and bookkeeping were offered during the three month course. Although successful in its educational efforts, much trouble was encountered in keeping trained personnel in the supply field. The supply specialty did not seem to offer the adventure and prestige of line organizations, thus, many trained supply sergeants later transferred to line organizations.¹

By 1939, when it was evident that Marine Corps Schools were not going to offer supply education in their courses of formal instruction, the quartermaster department established the

¹"School for Q.M. Sergeants opens at Norfolk," Marines Magazine, III, October, 1918, p. 15.

"Quartermaster School of Administration" at the Philadelphia Depot. This five month course offered such subjects as arithmetic, spelling, typing, Marine Corps Manual, circular letters, and the preparation and handling of all Navy and Marine Corps standard supply forms.¹

This Quartermaster School of Administration helped to fill the needs of the Marine Corps Supply System in clerical and administrative aspects. However, it did not offer anything in the way of specialist training which was urgently required by the growing commodity categories of supply in areas such as, record-keeping, stocklisting and cataloging.

With these simple beginnings in formal educational endeavor and the threatening signs of war, the quartermaster department did not pursue formal supply education any farther but took heed to the words of Major Jesse Dyer who stated in 1922:

Time is an element which will have much influence on the problem of furnishing adequate military schooling for the personnel of the Marine Corps. Too much should not be expected in the beginning, and a beginning only has been made so far. But, with a good system, a good beginning, and a good stimulus furnished by Headquarters, it is certain that sufficient time added is all that is necessary in order that the Marine Corps may enjoy the service of a well schooled personnel.²

¹B.F. Wilson, "Marine Corps Service Schools," The Marine Corps Gazette, XXII (June, 1939), 13.

²J.F. Dyer, "Military Schooling in the Marine Corps," The Marine Corps Gazette, VII (March, 1922), 30.

Summary

The advancements in the formal educational aspects of the arts of military science, as well as the service-wide recognition of aviation, communications, engineering, radio and foreign language as required specialist functions, is a credit to forward looking Marine Corps planning. However, the non-recognition and "look out for yourself" requirement placed on the supply system by Headquarters Marine Corps created the perfect situation for self-preservation, that tended to be created as a result of World War II.

It can be said, that the responsiveness of the Marine Corps Supply System to war-time demands, can be attributed to the self-education and dedication of officers and men like Colonel Radford who were able to provide the proper drive, guidance, and management required to enable the system to be progressive, and future oriented.

CHAPTER III

SUPPLY SYSTEM AND SUPPORTING EDUCATION, 1940--1946

Little change was made in the established educational policy of the Marine Corps during the period from 1940 to 1946. The true test of the value of the Marine Corps investment in formal schools for military science and various supporting specialist functions was about to be made during World War II.

A study of the supply system that was established during the war is important because the transformation of the commodity system of supplies into one coordinated system presented a need for well-planned formal education within the Marine Corps Supply System.

Overall Marine Corps Educational Results

The results of the Marine Corps investment in formal education at the "Marine Corps Schools" can be evaluated by the overall success of the Marine Corps in operations during World War II. However, one shortcoming pointed up during the war was a lack of knowledge in logistics planning and supply matters. Lieutenant Colonel L.C. Hudson best describes this "Combat Headache" in his statement:

After functioning as a battalion commander in an assault regiment in four operations, there remains with me one problem of troop leading which appears furthest from solution: supply in initial phases of landing. There is not enough detailed thought and discussion given to it.¹

In order to compensate for this lack of planning, Lieutenant Colonel Hudson proposed an "Administrative Annex" to Operation Orders, an annex still in use today. Such an annex would consider in detail the supply and logistical requirements during the landing phases of an amphibious operation, a subject not covered in detail at the Marine Corps Schools in earlier days.²

Commodity System of Supplies

When closely studied, the war-time supply function which was established consisted of seven separate and distinct commodity supply systems. They were: (1) General Property; (2) Engineer Supply; (3) Motor Transport Supply; (4) Ordnance Supply; (5) Electronic Supply; (6) Fuel Supply; and (7) Subsistence Supply. Each was headed by a Marine Corps Colonel who was responsible for the budgeting, procuring, storing, issuing, maintaining, repairing, and disposing of property and supplies within his commodity group. Each colonel operated independently of the other commodity groups and therefore, had a separate supply responsibility entity of his own.³

¹L.C. Hudson, "Combat Headache," The Marine Corps Gazette, (June, 1945), 28.

²Ibid.

³Interview with M.H. Forward, Deputy Assistant Quartermaster General USMC, January 8, 1965.

Since each commodity system used its own stock numbering technique for items of supply and prescribed its own methods for total operation, the Quartermaster General had little authority over each commodity system other than general coordination to ensure that the Marine Corps Supply System carried out its assigned mission. This mission was to:

. . . assist the Commandant of the Marine Corps in the discharge of his assigned responsibilities by accomplishing the general functions of providing food, clothing, equipment, facilities, disbursing, and similiar services.¹

In carrying out the supply mission, commodity system managers procured the items of supply within their commodity group and brought them into the system under the centralized control of the Quartermaster General. Once in the system, supplies were properly classified by commodity group, numbered and cataloged by each commodity system and sent to the supply centers located at Albany, Georgia, and Barstow, California. Here they were stored by commodity group. Base depots, acting as intermediate logistical support facilities in designated geographical locations, supported post and station supply. The two major base depots were at Camp LeJeune, North Carolina and Camp Pendleton, California. These depots carried the Supply System to the ultimate using unit, (see figure 1 page 25).²

¹"Marine Corps Supply System," Headquarters, USMC, November 22, 1955. (Speech in the Files of the Supply Analysis Office Headquarters, USMC). (Mimeographed,. Author Unknown.)

²Ibid.

Requisition
Flow

Matériel
Flow

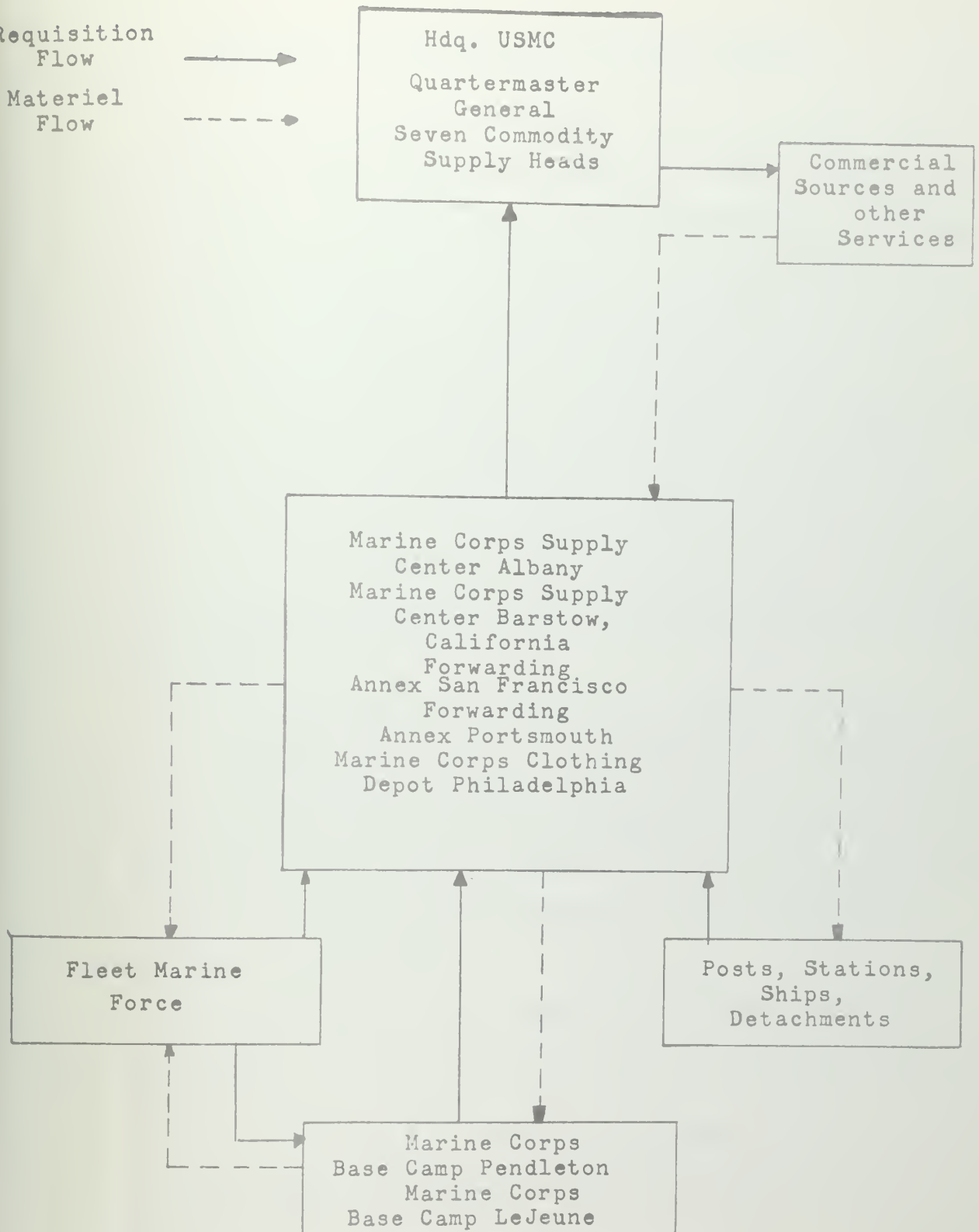


Figure 1.
Commodity Supply Distribution System

Education and the Commodity Supply System

Since each commodity system was responsible for its own education and training, various methods were used. However, the primary reliance was placed upon on-the-job training. Commodity heads at Headquarters Marine Corps would publish instructions to lower echelons of supply as to storing, issuing, cataloging, identifying, stock-numbering, and disposing procedures. Subordinate units of the system would implement those instructions under the supervision of officers and staff non-commissioned officers who grew up with the system. Procedures within each of the seven commodity systems as well as language were so different that interchange of personnel and/or information between systems was impossible.¹

Established within the electronic commodity system located at the Philadelphia Depot was a procedure of inventory control accomplished by electric accounting machines. This field of specialization was supported educationally through instruction given by International Business Machines, the manufacturer supplying the equipment.²

By 1946, when the war ended, International Business Machine Systems of stock control for ordnance and engineering

¹Interview with M.H. Forward, op. cit.

²Interview with William P. Battell, Quartermaster General USMC, February 8, 1965.

were in effect. Each directed its own methods of operation and procedures of instruction in cooperation with International Business Machine Corporation.¹

Summary

The war years produced a complex individualistic system of supplies within the Marine Corps classified as to special commodities of supply. It can be said that this system adequately supported the Marine Corps during World War II and pioneered in the field of electric accounting machines as a tool for managing inventory. It is also true of this system that a lack of coordination between the seven commodity supply systems was the rule, with each system duplicating one another in the areas of education, mechanization, supply procedures, and even stock inventory. This condition was to last until 1956.²

¹ National Archives, Washington, D.C. Folder No. 2385/130-130 Quartermaster, P-5. 2nd Endorsement on Ltr. QMGMC to CMC, Serial 2, April 9, 1946, p. 2.

² Interview with M.H. Forward, op. cit.

CHAPTER IV

SUPPLY SYSTEM AND SUPPORTING
EDUCATION, 1946--1956

Chapter IV establishes the formal educational development within the Marine Corps Commodity Supply System following World War II. This development is shown by considering the evolution of the commodity system of supplies in light of: (1) organizational structure; (2) resultant educational implications upon officer and enlisted personnel; (3) system responses to those implications; and (4) resultant system educational establishment.

Commodity Supply System Evaluation

In April 1946, the quartermaster department made a study of the organization of the commodity system of supplies in an attempt to evaluate its past performance and to project future reorganizational requirements. This organization study pointed out several weaknesses in the system as it existed during the war. The major weakness revealed that the newly established depots during the war were all placed under the responsibility of local commanders, most of whom were not supply officers or connected with the Supply System. Consequently, at all the depots, except the Philadelphia Quartermaster Depot, Fleet Marine Force

Commanders had supply support problems. It was found that some local commanders at the depots were filling their own supply requirements first and giving the Fleet Marine Force Units the materiel and supplies that were left--a policy not in keeping with the mission of the Supply Department.¹

As a result, the Commandant of the Marine Corps, in a letter of instruction dated April 26, 1946, placed all supply depots under the responsibility of the Quartermaster General by stating:

In order that comprehensive control of the entire Marine Corps Supply System may be assured, and to clarify the ambiguous relationship existing between continental supply depots and local commanders, complete management and technical control of all depots of supplies within the continental United States is hereby vested in the Quartermaster General of the Marine Corps. . . . The Quartermaster General shall promulgate all policies and instructions relating to the operations of the depot of supplies. . . .²

With this major problem area of the system resolved, the Quartermaster General, in a letter to the Commandant of the Marine Corps, wrote of another potential problem--technical education:

¹U.S. Marine Corps, Memorandum for the Commandant of the Marine Corps: Continental Supply System and Logistical Support of Fleet Marine Force Units Stationed in the United States, Washington, April 8, 1946. (in the Central Files of Headquarters Marine Corps).

²U.S. Marine Corps, Letter of Instruction No. 1264: Instructions Regarding Marine Corps Continental Supply System, April 26, 1946. (in the Central Files of Headquarters Marine Corps), p. 1.

It is essential that those supply systems which were found to be necessary during the war for the proper control of supply activities to be maintained during peace times in order that the Marine Corps will have established organizations and systems in operation that can be extended in the event of another war. The maintaining of I.B.M. systems of stock control, ordinance, engineering, and catalogues, must be continued. . . . To continue this dissemination of information, qualified people must be available. Such work is so technical that a rapid turn over of personnel could create many problems to the total supply system.¹

To add to the growing responsibilities and problems of Major General William P.T. Hill, the Quartermaster General, on July 16, 1946, the quartermaster department was changed to the "Supply Department." This was brought about through the consolidation of the Quartermaster's and Paymaster's Departments of the Marine Corps. This consolidation abolished the office and functions of the Paymaster's Department and placed the responsibilities of that department under the Disbursing Branch of the new Supply Department.²

As Quartermaster General, General Hill was charged with the military and administrative details of the Supply Department as well as the responsibility of fiscal director of the Marine Corps.

In considering only the supply function, this new Supply Department was made responsible for developing plans, policies and procedures to be followed in performing the supply,

¹National Archives, Washington, D.C. Folder No. 2385/130-130, op. cit.

²"Marine Corps Get New Supply Department," Army Navy Journal, July 20, 1946, p. 1385.

disbursing, and accounting duties of the Marine Corps. It was also charged with the administrative control of all Marine Corps supply depots, commissaries, as well as the purchasing and disbursing functions at all Marine Corps posts and stations. The supply branch of the Department was further charged with planning, procuring, storing, directing issues, assembling, and preparing for shipment, all supplies and equipment required by the Marine Corps. As a result of the "Commandants Letter of Instruction 1264," this branch also maintains control of the stocks at all supply depots as well as maintaining the stock and inventory control records on all government property.

At the lowest echelon of the supply function, the depot was charged with receiving, storing maintaining, and issuing all Marine Corps Supplies.¹

System Educational Implications

Marine Corps studies and Quartermaster recommendations indicated certain new educational challenges for the new Supply Department. The inclusion of the depots under the Quartermaster's area of responsibility, as well as the need to maintain skilled personnel to cope with expanding automation in various sectors of the commodity system, increased the educational requirement for a greater number of trained officer and enlisted personnel. In an attempt to meet this challenge of education, a number of formal schools were established.

¹National Archives, Washington, D.C. Folder No. 2385/130-130, op. cit.

Supply Department Educational Response¹

With a need for both officer and enlisted trained personnel the problems of education became important. This section will consider the response of the Supply Department to each.

Officer education

In response to the need for trained officers within the Supply System to work in and command the newly assigned depots, a category of "supply duty only" officers were established. These supply specialists, restricted to supply duty only, were to become the backbone of the Supply Department and provide the system continuity and expertise required by the new Supply Department.

Officers requesting assignment to the "supply duty only" status were sent to Camp LeJeune, North Carolina where a school of formal instruction was established. This school provided a generalized course of instruction in the functions of the new Supply Department as well as specific instruction in recordkeeping, property accounting, the use of catalogues, typing, and basic management and leadership training.

This response to the need for trained officer skills in the Supply Department marks the first time in Marine Corps

¹The information in this section was taken from the "Schools for Marines," The Leatherneck, XX (March, 1947), 58.

history that provisions were made to maintain a fixed number of qualified supply officers on duty to meet the officer requirements of the Supply System.¹

With the new supply duty only officers manning the system, the need for detailing line officers to supply duty decreased considerably. Once again, the position of the supply officer was changed from that of a staff function to a permanent assignment--a condition which had not existed since 1847.²

Enlisted education

In order to provide the Supply Department with trained enlisted personnel, four formal schools were established: (1) Basic Supply Department Enlisted Clerical Course; (2) Advanced Supply Department Enlisted Clerical Course; (3) Motor Vehicle Spare Parts, Supplies and Stockroom Procedure Course; and (4) Signal Supply Course.³

The basic course of formal instruction--the Supply Department Enlisted Clerical Course, Basic--was offered at Camp LeJeune, North Carolina and graduated three hundred enlisted men annually. The men were given general training in organization, procedures, forms, and administration practices of the entire Supply Department. Thus, a basic course of instruction for all commodity supply systems was placed in effect.

¹Interview with William P. Battell, op. cit.

²Sanderson, op. cit., 62.

³"Schools for Marines," op. cit., p. 57-58.

This advanced course of formal instruction--the Supply Department Enlisted Clerical Course, Advanced--was also offered at Camp LeJeune, North Carolina and was open to Marine non-commissioned officers who had at least a year of experience in the supply field under on-the-job training conditions, or were graduates of the Basic Clerical Course. Each year one hundred eight men were trained in the subject areas of: modified property accounting; federal stock catalogues; tables of allowances; subsistence supply; stock record control procedures; warehousing and storage; purchasing; transportation; and typewriting.

Those non-commissioned officers who graduated from this twenty weeks of instruction were able to fill billet vacancies in any one of the general supply, engineer supply, ordnance supply, fuel supply, or subsistence supply commodity fields, after further on-the-job training in that commodity system.

The thirty six annual graduates from the Motor Vehicle Spare Parts, Supplies and Stockroom Procedure Course of formal instruction were provided six weeks of instruction in issuing, storing, requisitioning, and accounting for tools, supplies, and motor transport peculiar spare parts and materiel. Only those persons that had successfully completed a course of instruction in automotive mechanics or the "Advanced Supply Department Clerical Course," were permitted to apply for this course of instruction. Enlisted Marines completing this course of instruction returned to the motor transport commodity supply system for duty.

The Signal Supply Course of formal instruction, established to fill billet vacancies and requirements of the "Electronic Commodity Supply System," was given at the Depot of Supplies, Philadelphia, Pennsylvania. This "Signal Supply Course" provided its one hundred eighty annual graduates with nine weeks of instruction covering such areas of supply as: signal supply orientation; signal supply nomenclature; elements of electricity; item identification; signal supply cataloging; allowances; administration; procurement; salvage; materiel routing and receiving; shipping; supply storage; warehousing; and accountability.

This new educational endeavor which was undertaken by the Supply Department was the first formal educational support the Marine Corps Supply System had enjoyed in its one hundred forty-eight year history. The educational progress proved essential as the student output provided for the Supply System's educational requirements throughout the Korean conflict. This system of education continued until 1956 when once again the Supply Department began studying the commodity system of supplies with the idea of integrating the seven commodity systems into one major system of supply support.

Summary

Although still not recognized as a specialist field by the Marine Corps, the position of the Marine Corps Supply System was enhanced by: (1) the establishment of the supply duty only

category of officers within the Marine Corps--a major break from the traditional philosophy that any Marine Officer could adequately administer the supply function; (2) the creation of four formal enlisted supply schools--an endeavor to raise the proficiency of supply support rendered by the enlisted Marines manning the Supply System; and (3) the welding of the complete supply function of the Marine Corps under the responsibility of the Quartermaster General--a shift that provided better supply support to Fleet Marine Force Units.

It can be truly said that the year 1946 provided the most significant advances in formal education in the history of Marine Corps Supply.

CHAPTER V

THE CHANGING SUPPLY SYSTEM, 1956--1965

In chapter five the changing Marine Corps Supply System in its response to the internal and external pressures of the Quartermaster General, the Commandant of the Marine Corps, and the Department of Defense is discussed. These pressures and resultant changes brought about the integration of the Commodity Supply Systems into the inventory control point, push-type Supply System of today. Since any change in a complex system as this has educational implications, the educational response to each major change will be shown. Finally, an actual example of the educational support to the system will be made by review of excerpts from the Government Accounting Office 1961 report concerning the Third Marine Division.

Supply Department Pressures

During late 1955 and early 1956, the commodity system of supplies came under study by the Quartermaster General. The results of this study revealed that: (1) between commodity systems there was a large amount of duplicate inventory maintained under various identifying numbers; (2) the theory of supplies being oriented by commodity groups did not provide the required flexibility for horizontal and vertical growth to

support a progressive Marine Corps; (3) the commodity system lacked coordination, information, standardization, and the free exchange of practices, and procedures; and (4) the commodity system was uneconomical in the utilization of manpower, money, and materiels.¹

In response to this study, late in the year 1956, the Quartermaster General ordered the seven commodity supply systems to combine into one integrated system of supply. Immediate attention was given to identifying, computing, and accounting for the spare parts and materiel required to fulfill Fleet Marine Force demands placed upon the Supply System.

The integration of the total system was a difficult task. It required elimination of any duplication of items stored within the old commodity systems--which had now grown to a one and one half billion dollar inventory²--as well as: (1) revitalizing the stereotyped thinking of higher ranking officers associated with the old commodity system; (2) revamping the military occupational speciality structure of 4696 military personnel--in order to allow for free movement within the system;³ and (3) providing new educational and training criteria for the integrated system.⁴

¹Interview with M.H. Forward, op. cit.

²"Marine Corps Supply System," op. cit.

³Ibid.

⁴Interview with M.H. Forward, op. cit.

Educational Response

The four courses of formal supply schooling previously available to enlisted personnel were combined into one supply administration course offered at Camp LeJeune, North Carolina. This package of instruction, still in a state of transition, offered basically those subjects previously taught in the Advanced Supply Department Enlisted Clerical Course, which were those general supply administration subjects applicable to all areas of supply.

In order to attend this school, enlisted Marines were required to be qualified in their new military occupational speciality through on-the-job training. Therefore, new Marines attending this school of formal instruction were on their second enlistment and had been working in the supply field for at least two years with no formal instruction in supply.

Those Marines who had worked within one of the commodity systems had previously attended a school of formal instruction. Therefore, on-the-job training in the practices and procedures of the newly integrated system aided them in making the system transition.

The officer personnel of the Supply System during this period continued to be basically supply duty only officers. Shortages in officer requirements were filled either by volunteers or by officers detailed from line billets. After completion of the Unit Supply Officers Course, officers would serve two and three year tours in the supply system.

Although the Supply System was able to make changes in its educational program over periods of time, the problems of detailing officers to supply duty, heavy reliance on on-the-job training for enlisted personnel, and a self-generating type educational structure were soon to lead to difficulty in certain areas of supply. The educational system was not producing the quantity, quality, and continuity of personnel needed to operate and manage the advancing Supply System.

In discussing the Supply Department's reactions to the emerging educational organization in support of the newly integrated supply system, Major General Batell stated:

. . . the Quartermaster General has always fought for more formal education, as it is something that has been required all along; however, philosophies concerning this vary with the change of Commandants of the Marine Corps.¹

Supply System Response

The newly integrated system was designed under an inventory control point concept. To carry out this new concept, the depot at Philadelphia was assigned the task of expanding the electronic accounting machine capabilities of the old electric commodity supply system into an electronic accounting machine inventory and stock control operation for the entire Marine Corps Supply System.²

¹Interview with Major General William P. Battell, op. cit.

²Interview with M.H. Forward, op. cit.

In order to carry out this assigned inventory control function, the Philadelphia Depot was relieved of its manufacturing, issuing, and storing responsibilities. By 1957, when the system integration was completed, the clothing manufacturing function was turned over to the Army Single Manager. This latter move terminated a one-hundred-year manufacturing history established by and for the Marine Corps.

The resultant inventory control function, now the primary responsibility of the Philadelphia Depot, consisted of: (1) adjusting supply to demand; (2) establishing provisioning and stock replenishment requirements; (3) developing and maintaining technical manuals and supply publications; (4) cataloging, identifying, and stock numbering all Marine Corps centrally managed items; and (5) total inventory management responsibility for approximately 268,000 items of supply.¹

This newly integrated supply system with its inventory control point marked the birth of the present day Marine Corps Supply System.

Commandant of the Marine Corps Pressures

By 1958 the newly integrated Supply System was faced with "growing pains". In describing military supply systems, in a speech to the Advanced Materiel Requirements Course Paul H. Riley, Deputy Assistant Secretary of Defense stated:

¹Armed Forces Supply Support Center, Report on Management of Electrical Electronics Material (Washington: United States Marine Corps), p. 13.

. . . systems are facing four new impacts which dictate a very critical and objective assessment of our current and future capabilities. These are: (1) the tremendous increase in mobility of our fighting forces; (2) new weapons and technology; (3) improved communications and transportation; and (4) the availability of automatic data processing equipment.¹

In an attempt to ensure Marine Corps consideration of certain critical areas of impact, the Commandant convened a board now known as the "Adams Board." The objectives of this board were to study the Supply System and make specific recommendations concerning: (1) What electronic equipment should be utilized by the Supply System; and (2) What Supply System organization could best use such equipment.²

The board recommended a bi-coastal central inventory control point, push-type Supply System to be organized as follows: (1) a Quartermaster General; (2) two-inventory control points, one with electronic capabilities; (4) one forwarding Annex; and (5) mechanized stock accounts.³

Under the board's recommendation, the Quartermaster General was to act as the Marine Corps supply manager with the responsibility for the proper functioning of the Marine Corps

¹Deputy Assistant Secretary of Defense Paul H. Riley, Speech to the Participants in the Advanced Material Requirements Course, Air Force Institute of Technology, Air University, January 15, 1959 (in the Files of the Supply Analysis Office Headquarters, USMC). (Typewritten.)

²Interview with M.H. Forward, op. cit.

³"Marine Corps Supply Department 1959" (Speech in the Files of the Supply Analysis Office Headquarters, USMC). (Typewritten).

Supply System. To aid the Quartermaster General in discharging his responsibilities, two inventory control points were recommended. The first, located at Philadelphia was to be equipped with a Univac Computer and centrally controls and manages all items of supply procured with stock fund money. The second inventory control point, located at Headquarters Marine Corps, manually exercises control over major items of equipment procured with appropriated funds.

To provide supply support for the bi-coastal complex system, two major supply centers, one on the east coast and one on the west coast, were established. Each center, equipped with a Univac Computer, was assigned the primary responsibility of receiving, repairing, storing, maintaining, and issuing materiel used by the Marine Corps. Each center was further required to furnish materiel in wholesale quantities to other stock accounts located within the geographic area of the center as well as provide materiel on a retail basis to customers that are directly dependent upon the centers.

One forwarding annex was to remain at San Francisco to act as an intermediate logistical facility for processing the forward movement of supplies to overseas units.

In direct supply support of using Marine Corps Units, mechanized stock accounts equipped with data processing equipment were created at large stations. These facilities provided retail supply service to the using units attached to or supported by that station.

In recommending this system organization, the Adams Board perceived that by pushing the supplies close to the using units, with back up quantities close at hand, the system would be responsive to Marine Corps needs and to the adoption of electronic equipment. The recommendations of the Adams Board was accepted by the Commandant and scheduled for completion by 1962.

Department of Defense Pressures

During the early years of the new System Organization, pressures were being placed upon the Supply System. The Department of Defense, in a drive toward centralization of military supply functions, created the Armed Forces Supply Support Center. This center provided central control of supplies common to all services and coordinated supply management of common materiel in an attempt to eliminate duplication and overlapping of supply operations between services.¹

During 1961 the Department of Defense created the "Defense Supply Agency." This new organization assumed the wholesale supply support mission for all service supply functions.²

Also during 1961, the disbursing function of the Marine Corps was taken from the responsibilities of the Quartermaster General and placed with the fiscal division of Headquarters Marine Corps.

¹Ibid.

²Colonel A.S. Sanders, Supply Department Organization Speech, 1962. (in the Files of the Supply Analysis Office Headquarters, USMC). (Typewritten.)

With only minor internal readjustments those new requirements were met by the Supply System. However, with changes, both internal and external, taking place which had far reaching effects upon the Supply System, the Commandant appointed a study group to delve into and determine the position of the Marine Corps Supply System within the changing Department of Defense centralized supply concept.

Supply Department Study No. 3, 1962¹

Three definite areas of study were assigned the study group: (1) Research the recent developments in the integrated materiel management area of the Department of Defense Level; (2) Develop a recommended Marine Corps Supply System concept for future operations; and (3) Develop and recommend a Supply System that will support the future concepts by outlining organizational structure and supporting data processing hardware.

As a result, the study group made the following recommendations to the Commandant: (1) Retain the existent Marine Corps Supply System; (2) Establish a policy of local stock account control over items which have been assigned to the Department of Defense wholesale integrated management; (3) Retain the present system of control over Marine Corps managed items; and (4) Establish a policy of centralized item control over

¹The information in this section was taken from the U.S. Marine Corps Supply Department, "Supply Department Study No. 3, 1962," Headquarters, USMC, 1962. (in the Files of the Deputy Assistant Quartermaster General).

items having a Fleet Marine Force application, including those which have been assigned to the Department of Defense for wholesale integrated management.

The speaker as recommended by the group to continue with the Marine Corps Supply Mission was basically that outlined and implemented by the Adams Board. Since then, however, various refinements had taken place and the system that was serving the Marine Corps supply needs was organized as follows, (see figure 2 page 48):

. . . two Inventory Control Points (one in Washington, D.C. and one in Philadelphia, Pennsylvania) which exercise control over assets positioned within two Coastal Complexes. Each Complex is headed by a Supply Center, (Barstow in California and Albany in Georgia) which, in turn, supports Stock Account activities at Marine Corps Bases, Recruit Depots, etc. The Supply Centers provide direct support to certain customer units, particularly Fleet Marine Force overseas units. The Stock Accounts deal directly with customers such as Divisions, Wings, Separate Battalions, and similar units.¹

. . . Each Supply Center has a Remington Rand Univac file Computer, and the Philadelphia Activity (which provides accounting support to Headquarters Marine Corps as well) has a Univac and a solid state BO Remington Rand Computer.²

The Stock Accounts . . . maintain records through the conventional offset tabulating equipment technique. Certain Stock Accounts are supported by IBM 1401 card computer systems. Daily, all transactions affecting inventory or stores balances are transcribed into the computer of the supporting Supply Center.³

Major General Chester G. Allen, in a speech to the field

¹ Ibid., Appendix 3, p. 21

² Ibid.

³ Ibid.

grade officers graduating from supply school, discussed the importance of this automatic push-type supply system to the Marine Corps as one that:

. . . gives continuity, flexibility, elasticity, mobility, economy, and effectiveness, all of which are requisites of a good supply system.¹

Educational Response

As an answer to the educational needs encountered in supporting a changing Supply System, the following educational implications will be discussed: (1) supply duty only status; (2) officer schooling; (3) enlisted schooling; (4) Marine Corps Institute Courses, and (5) other service schools.

Supply Duty Only Status²

In January, 1960, the Commandant of the Marine Corps requested that Congress repeal the Supply Duty Only Legislation affecting the Marine Corps. Congress complied with this request thus leaving the Marine Corps Supply System once again with random officer assignment as its primary method of obtaining new supply officers.

¹Chester R. Allen, Major General, USMC. Speech to Field Grade Officers Graduating from Supply School, Class 1-62, Camp LeJeune, N.C. August 10, 1962. (in the Files of the Supply Analysis Office Headquarters, USMC). (Typewritten.)

²The information in this section was obtained from an Interview with Major General William P. Battell, op. cit.

Requisition
Flow
Materiel
Flow

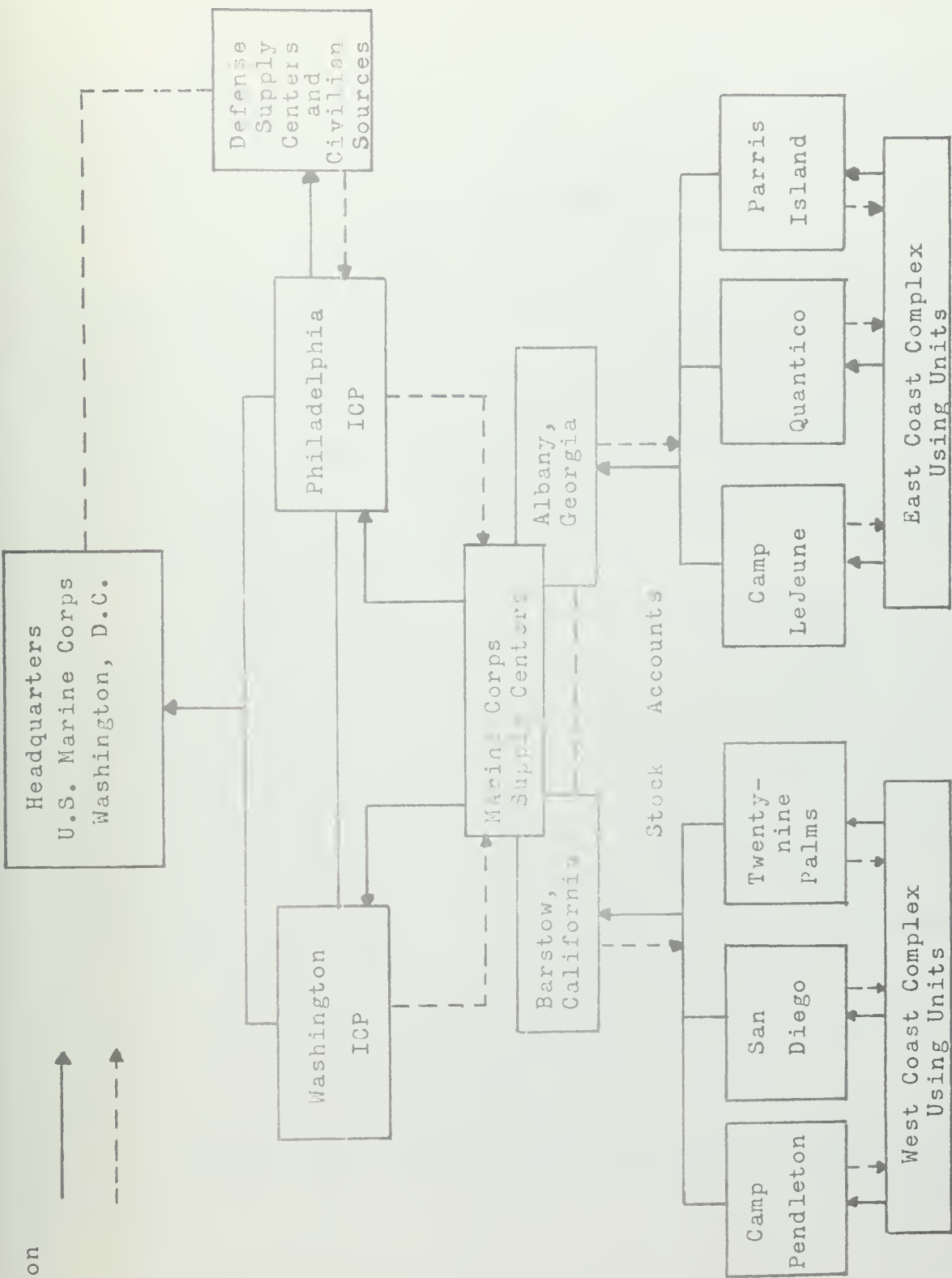


Figure 2
Inventory Control Point Distribution System

The Commandant's philosophy in requesting this action was that by giving all officers a tour in supply there would not be created a separate corps of supply duty officers who were restricted in their assignment capabilities.

The Quartermaster General was not sympathetic with this change because the new officers entering the Supply System would be inexperienced Lieutenants. Since many were not career supply officers and would be leaving the Marine Corps, or the Supply System, after three year tours in supply, a shortage of trained and experienced supply managers would be felt at the captain and major ranks in future years.

In order to fill some of the voids created by disestablishing the supply duty only officers, a Field Grade Officers Supply Course was established at the Marine Corps Schools, Camp LeJeune, North Carolina. This school was scheduled on an as-required basis to meet Supply System demands. Although the school-trained officers would not replace the experience of the former supply duty only officers, it was felt by the commandant that with adequate training and career management, they would ultimately reach the desired level of skill and competence required of the Supply System.¹

¹"Memorandum for the Commandant of the Marine Corps" (G-1 Study No. 1-64. Washington, D.C., May 19, 1964), p. 9.

Officer Education¹

Two schools of formal education were provided to train officers entering the Supply System: (1) Supply Course for Field Grade Officers, and (2) the Unit Supply Officer Course.

The Supply Course for Field Grade Officers, a formal course of instruction, is provided to familiarize seventy field grade officers annually who were assigned or scheduled to be assigned duty in the supply field. This course emphasizes the managerial aspects of the supply function and is an attempt to fill the managerial void created when the supply duty only officer status was discontinued.

The Unit Supply Officer Course, is a formal course of instruction created to train lieutenants and captains with no previous supply experience to perform duties in the supply field. The two hundred fifty-six annual graduates are given instruction with emphasis on the basic principles of catalogs, record keeping, stock numbering and general management required by small unit, Fleet Marine Force Battalion, and post and station level supply.

Enlisted Education²

Two schools of formal instruction are offered to enlisted personnel: (1) Supply Administration Course, and (2) Advanced Warehousing Course.

¹The information in this section was taken from the U.S. Marine Corps, Marine Corps Formal Schools Manual: MCO P1500. 12B, April, 1962, pp. 4, 53, 171.

²Ibid.

The Supply administration Course is a formal supply course offered as enlistment training designed to provide formal training in supply principles, procedures, and techniques of the Supply System. The one hundred eighty annual graduates perform the typing, recordkeeping, cataloging, requisitioning, inventory, and other clerical functions required at all levels of the Supply System.

The Advanced Warehousing Course, a formal Marine Corps Supply Course is offered as second enlistment training and qualified sixty corporals and sergeants annually for performing the warehousing operations required throughout the Supply System.

Although these schools of formal instruction are available to second enlistment Marines, those Marines doing the basic Supply System functions of recordkeeping, cataloging, warehousing and requisitioning still depended upon on-the-job training to obtain their basic skills. Once trained and qualified in the supply field they apply for and avail themselves of the formal instruction offered.

Marine Corps Institute Courses¹

The Marine Corps Institute, acting under the supervision of the training and education Section of the G-3 at Headquarters Marine Corps, prepares correspondence courses of instruction for

¹The information in this section was taken from the U.S. Marine Corps, Marine Corps Institute Handbook: MCIO P 1550. 1B, March 1, 1963, p. VIII, 53.

all phases of Marine Corps training. To assist the Supply Department in providing refresher training and as an aid to on-the-job training, four correspondence courses are offered to Marines in the supply field: (1) Basic Warehousing; (2) Preservation, Packaging, Packing, and Marking Items of Military Supply; (3) Marine Corps Stock Lists, and (4) Determination of Supply Requirements.

Basic Warehousing

This course of instruction offers in six lessons the basic principles, methods, and procedures of effective and efficient warehousing practices. Within the twenty hours of instruction allowed for this course, subject matter such as storage facilities, materiel handling equipment, storage layout, and stock location are taught.

Preservation, Packaging, Packing, and Marking Items of Supply

This course teaches in six hours of instruction how to maintain supplies in a ready for use condition, as well as how to prepare items of supplies for shipment or storage. Specific subject matter such as specifications and standards, packaging and packing containers, packing for air shipment, and marking are stressed.

Marine Corps Stock Lists

This eighteen hour correspondence course stresses

instruction that enables Marines to utilize stocklists to obtain stock numbers, item descriptions, prices, units of issue, and other related data.

Determination of Supply Requirements

In five lessons this course presents instruction in the proper use of tables of allowances, tables of equipment, tables of organization, and other supply allowance publications. This course is of particular value to supply personnel responsible for determining initial combat mount out requirements, resupply, and special allowances.

By applying for these courses, Marines receive text books and books of questions, which if worked and studied in conjunction with on-the-job experience, are beneficial in qualifying the Marine in his particular area of supply. Upon completion of all course lessons a final test is administered under the supervision of an officer, and if passed, the Marine receives a certificate of completion.

Other Service Schools

In addition to these Marine Corps Schools there are eight Army, Navy and/or joint service schools which admit a quota of Marine Corps officers and enlisted. These schools offer advanced instruction in special areas of supply and logistics.¹

¹U.S. Marine Corps, Marine Corps Formal Schools Manual, op. cit.

An Example of System Response

Late in 1961, the Commandant of the Marine Corps was informed by the Government Accounting Office, then in the process of inspecting the Third Marine Division Fleet Marine Force located on Okinawa, that an unsatisfactory logistical situation existed within the Division. Later, in their final report of 1963, they pointed out that:

. . . shortages of parts needed to repair combat equipment resulted from supply management deficiencies . . . stock records accumulating prior stock requisitioning history were not maintained, and sufficient stocks were not being ordered to meet established stock level requirements.¹

The 1961 reaction to this unsatisfactory condition was to airlift seventy-two trained supply and maintenance personnel to the Third Marine Division to begin correcting the problem areas and to fill the billets where shortages existed. Fortunately, at no time was the Third Marine Division incapable of performing any of the missions projected for it.²

Major General Battell, the Quartermaster General, in discussing this situation in an interview stated:

The Marine Corps presently would not have as high an interest in supply and supply education, had it not been for the Government Accounting Office investigation of supply in the Third Marine Division.³

¹U.S., Comptroller General, Report to the Congress of the United States; Unsatisfactory Condition of Combat Vehicles and Equipment in the 3rd Mar. Div., Okinawa. USMC, Washington, 1963, p. 14.

²Commandant of the Marine Corps, "CMC Notes: Summary 3rd Mar. Div., GAO Report Regarding Logistic Situation," Headquarters, USMC, Feb., 1964. (in the Files of the Supply Analysis Office Headquarters, USMC).

³Interview with Major General William P. Battell, op. cit.

Major General Battell, thus pointed up the fact that "requirements have always been greater than the assets of educated supply personnel."¹

Emerging Educational Policies²

In order to prevent such problems in the future and to aid Fleet Marine Force Commanders in performing their mission, new educational policies and procedures have been implemented: (1) A total of eight hundred first enlistment Marines are being sent each year to the Supply Administration Course direct from recruit training; (2) Through Headquarters Marine Corps, increased emphasis is being placed on the general appreciation for the supply field and its problems and needs; (3) Marine Corps Schools, Quantico, Virginia, have added additional hours of general supply instruction to their Junior and Senior Schools; (4) The Marine Corps Institute has published new and revised courses in Warehousing and Organic Supply; (5) The Commandant of the Marine Corps has published a Guide Book for Commanders, a book strong on general supply and logistics for use at the unit commanding officer level: and (6) A packaged course of instruction for officers and staff non-commissioned officers has been provided to major commands.

¹Ibid.

²The information in this section was taken from the Major General William P. Battell, Quartermaster General, USMC, Speech Given by the Quartermaster General to the General Officers Symposium Headquarters, USMC, 1964. (Speech in the Files of the Supply Analysis Office Headquarters, USMC). (Typewritten.)

Although these forward moves in the area of overall Marine Corps Supply Education are underway, the Supply System complexity is growing, too. A former Quartermaster General, Major General Battell has indicated that:

. . . The job for awhile is going to become less simple. We are getting more items in our inventory at all times, and end items are becoming more complicated and have more components. So, there is no room for complicated record keeping, for make-work, or for non-essential records that just bog down the real effort.¹

Summary

The ten-year period between 1955 and 1965 has been an age of growth for the Marine Corps Supply System.

Technically, the Supply System evolved from a manual system supported by electric accounting machines to a complex electronic computer supply system supported by manual operations. Unfortunately, these manual operations in support of such a system require highly trained personnel. This the Marine Corps did not provide, as was evidenced by the Government Accounting Office Report of the Third Marine Division.

It seems that the Marine Corps was following the pattern of industrial organizations that:

. . . tend to under-invest in "people power" assets as compared to the price invested in mechanical assets.²

¹Ibid.

²Robert G. Bowman, "Establishing Broad Training Objectives: Programed Instruction in Industry," Management Bulletin No. 22, American Management Association, (1962), p. 6.

It can be said of the educational system, that the basics are present. However, the late 1964 system of sending enlisted Marines to formal schooling only after completion of on-the-job training, produced a large number of inadequately trained personnel responsible for maintaining and producing the records and data required for a modern electronic Supply System.

The question arises as to whether or not the management deficiencies found within the Third Marine Division were a result of the continuity lost within the Supply System by the loss of the supply duty only officer specialist. Brigadier General Chester R. Allen, then Assistant Quartermaster General, cautioned a 1956 class of officers graduating from the Unit Supply Officers Course:

. . . Accomplishing your duties may mean instructing untrained personnel, solving personnel problems and assigning men where they will be most efficient. Untrained and indifferent personnel has long been a problem within any group that supplies services and materials. Due to the nature of a lot of our work, the Supply Department does not get the "Cream of the Crop," when the assignment of recruits is effected.¹

Caution must be taken to ensure that such a situation does not exist in today's assignment of first enlistment Marines to formal supply schooling.

¹Brigadier General Chester R. Allen, "Speech to the Graduating Class of the Unit Supply Officers Course," Camp LeJeune, North Carolina. (Undated Speech in the Files of the Supply Analysis Office Headquarters, USMC). (Typewritten.)

CHAPTER VI

A LOOK INTO THE FUTURE

Having considered the history of the Supply System from its inception to the present it seems appropriate to cast an eye upon the future. This chapter will discuss the new Marine Corps Unified Materiel Management System in light of its organization and the supporting education it will require. Since little information is available on the actual educational implications of the new Materiel System, a projection into the future potential of the educational resources of the Marine Corps is made in an attempt to show their application to the new Materiel System.

The Supply System of Tomorrow¹

John Diebold, in his testimony before Congress concerning the effects of automation on education stated:

I feel very strongly that the educational problem is the most challenging one we shall have to face as the age of automation advances.²

¹The information in this section was taken from the "System Specifications for Marine Corps Unified Materiel Management System" (Headquarters, USMC, Washington, D.C., November, 1964).

²John Diebold, "Congressional Testimony," Automation Implications for the Future, ed. Morris Philipson (New York: Random House, 1962), 63.

Such testimony emphasizes the importance of the educational program required to support the new Marine Corps Materiel System.

Effective July 1965, the Marine Corps will begin implementing its latest system of supplies, the "Marine Corps Unified Materiel Management System, MUMMS." Through the use of an "Automatic Digital Network, AUTODIN," this Marine Corps Materiel System will now be linked with the total Department of Defense Supply System Complex, (see figure 3 page 60).

As presently planned, the new Materiel System is to be composed of fourteen major sub-systems each of which is responsible for accomplishing one portion of the total logistic responsibilities assigned to the Marine Corps Materiel System.

This new Materiel System, unlike the present System, is made up of two supply strata: (1) one inventory control point, and (2) eight remote storage activities.

The single inventory control point, located in Philadelphia, is assigned the responsibility for performing the following eleven sub-system functions required by the Materiel System.

1. Inventory Control.
2. Stores Accounting.
3. Automated Procurement.
4. Cataloging.
5. Applications.
6. Provisioning.
7. Pre-positioned War Reserve.
8. Selected Item.
9. Budget.
10. Special Programs.
11. Supply Management.¹

¹System Specifications for Marine Corp Unified Materiel Management System, op. cit., p. 02-9.

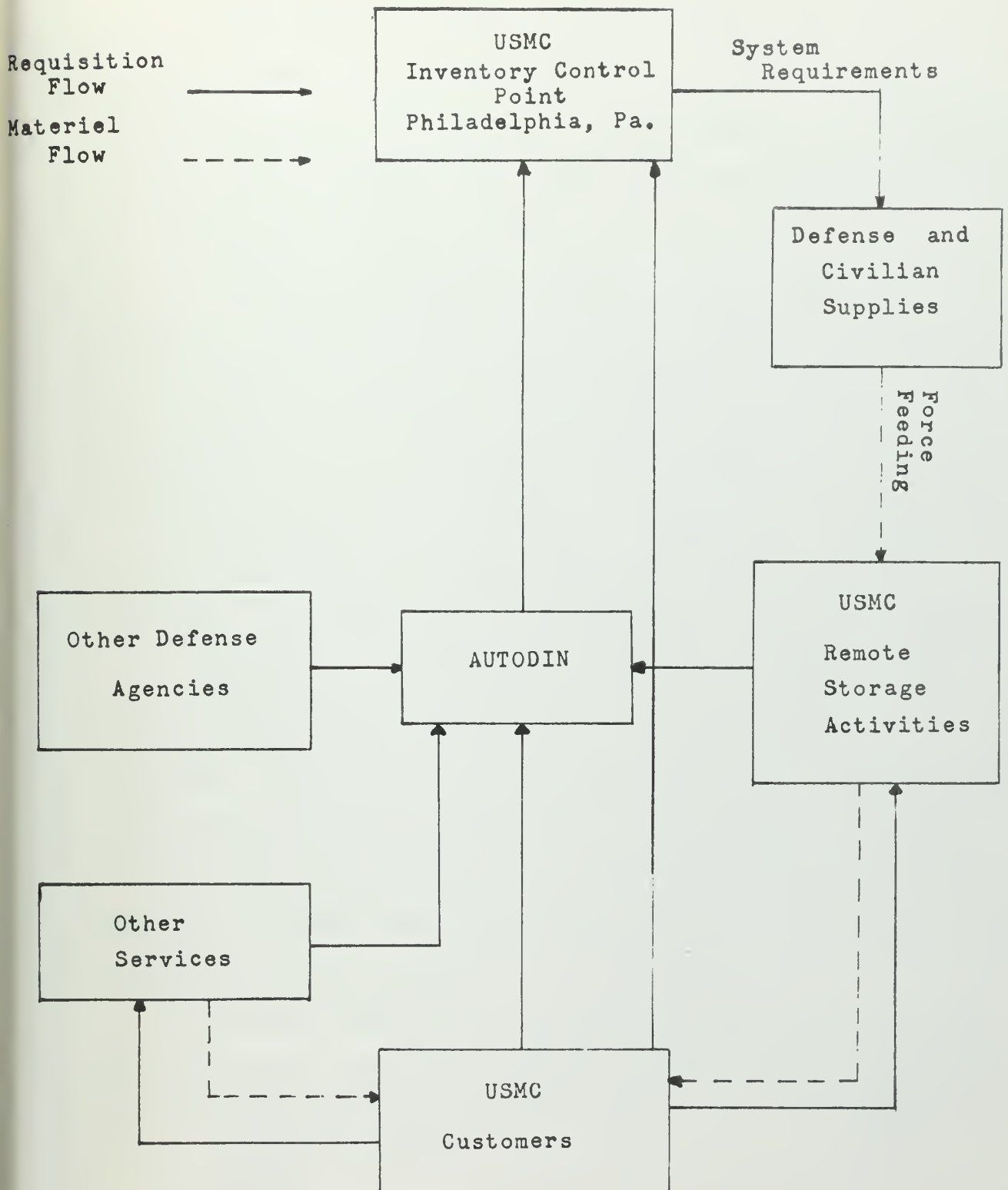


Figure 3
Marine Corps Unified Materiel
Management System

For timely management decision-making, computer connections between sub-system functions permits integration of these functions, so as to enable supply managers at the inventory control point to obtain real time supply intelligence by querying remote inquiry devices.

The inventory control point, through the use of the Automatic Digital Network, maintains and controls the position of all assets in the Marine Corps distribution system. These assets will be distributed by individual remote storage activities located at: (1) Albany, Georgia; (2) Camp LeJeune, North Carolina; (3) Parris Island, South Carolina; (4) Quantico, Virginia, (5) Barstow, California; (6) Camp Pendleton, California; (7) San Diego, California; and (8) Twenty-nine Palms, California.¹

The eight remote storage activities provide supply support to customers located within the geographical area of the activity. However, in the event materiel is not on hand at the supporting activity, the inventory control point can direct materiel shipment from any one of the other activities having inventory on hand, thus filling most customer requirements within a twenty-four hour period.²

Through the use of new computers and other electronic data processing equipment, remote storage activities possess the

¹Ibid., p. 02-13.

²Ibid.

capabilities for performing the sub-system functions of: (1) warehouse and traffic management; (2) decentralized stock control; and (3) maintenance management information.¹

These remote storage activity sub-system functions enable the eight activities to maintain inventory and accounting control records on all items of stock that are decentralized for local control. Also, demand and inventory control data is maintained on all items of inventory pre-positioned at the activity by the inventory control point.

There are two requisitioning methods for placing demands on the new Materiel System: The formal Military Standard Requisitioning Procedure (known as MILSTRIP) is supplemented by an informal method.

The formal MILSTRIP procedure enables every customer, through the use of the local automatic digital network stations, or direct mail, to place demands directly with the inventory control point. Here, where total system inventory records are maintained, customers have available to them the knowledge of all Marine Corps stores assets, (see figure 3 page 60).

Informal requisitioning procedures, through the use of shopping lists, personal selection or other established means, enables the customer to go direct to remote storage activity retail issue points for materiel requirements.

¹Ibid.

Supporting Education Requirements

The total number of personnel requiring new and up-to-date education and training should be somewhat reduced. This is due to the new system combining old supply functions, eliminating layering of personnel within the system, and redistributing personnel. However, due to the complex nature of the highly automated system, plans must be made to ensure that system personnel are of the highest educational quality and that a sufficient quantity is available to maintain the system at top efficiency.

At present, the educational support of the new Materiel System is the same as for the present Supply System. However, with the increased use of electronic equipment, mistakes entering the system can be compounded at such a rapid rate that much attention should be given to future educational requirements.

Getting the proper people

A broadening of the overall educational base of formal schooling is required for personnel entering the system. On-the-job training can no longer be the primary training device, but must be converted to an internship after formal schooling. In broadening the educational base for enlisted training, greater attention must be given to the system specialist needs. This can now be done with the new military occupational specialty designations classifying personnel according to manual or mechanized accounting skills. In establishing formal supply

education under this concept, it is much easier for the schools to adjust and readjust to the rate of technical change that can be expected within the Unified Materiel Management System.¹

New officers filling the supply management billets of the Materiel System are to be formed around the nuclei of supply officers who grew up with change over to the new Materiel System. The choosing of new officers to fill System vacancies should be accomplished: (1) on a volunteer basis; (2) by the officer's proven ability to learn; and (3) by the officer's ability to exercise good judgment.

Providing adequate instruction

Those officers selected to be sent to the Supply Officers Course at Camp LeJeune, North Carolina, along with basic system skills and organization, should be taught the managerial skills required by the System.

These skills closely parallel those of industry, namely: (1) the ability to be flexible and adapt to accelerated change; (2) the ability to be imaginative and innovative; (3) skills in coordinating and correlating forces within and outside the system.²

¹U.S. Marine Corps, MOS Manual NAVMC 1008-PD (Revised 1954 with change 17 of January, 1965).

²J.M. Bertotti, "Business Education: Five Emerging Trends," Management Bulletin No. 34, American Management Association, (1963), 29.

Once trained and assigned within the Materiel System, both officer and enlisted personnel are going to be subject to intensive periods of proficiency training. Such training is necessary in order to keep personnel up-to-date on new system innovations as well as available for reassignment within the Materiel System. The major difficulty which arises, is that of developing a system that can extend this formal-type education to Marines in the field where it can be conducted while on the job.

In this critical area of training and education, programed instruction offers the greatest potential. Although not the cure-all for Materiel System educational growing pains, David Cook has pointed out that:

The importance of programing lies in its promise for moving men from one set of conditions to another with efficiency and low cost.¹

The Marine Corps has a potential to enter into the field of programed instruction in that it has an in plant educational system available to aid in the development of Materiel System training requirements. The Marine Corps Institute, acting in this capacity, could perform the task of the programmer and develop program training packages for the Materiel System. Such packages should not be an all-inclusive correspondence course approach to supply, but small booklets of program instruction.

¹D.A. Cook, "Problems of Training and Retraining; Programed Instruction in Industry," Management Bulletin No. 22, American Management Association, (1962), 1.

These booklets, if broken into task units and presented in a logical learning sequence with small understandable steps, can maximize instruction effectiveness with minimum supervision and assistance from an instructor.

United Airlines, in utilizing an instructional system such as this, was able to familiarize 29,000 employees with a new flight numbering system by publishing a pocket size program instruction booklet for twenty-nine cents, an investment that saved many man hours and much money.¹

By using the experience of the Marine Corps Institute to produce the program of instruction for the Materiel System, the Marine Corps can pioneer this new field and capitalize on the Institute's understanding of: (1) learning theory; (2) knowledge of subject matter; and (3) testing and retesting subject material to ensure that it is written to the individual job level requirements, all of which are essential for the writing of a sound program of instruction.²

The more advanced approach to programmed instruction available for exploitation by the Marine Corps is computerized program instruction. With the Marine Corps Institute being given computer capabilities and acting as the central computer station, a series of programmed instruction can be sent to the computers

¹N. Buckley, "Programed Learning: Return to Reality," Dun's Review, (May, 1964), 128.

²Albert S. Woodhouse, "Recorded Programed Instruction," Management Bulletin No. 22, American Management Association, (1962), 33.

located at the inventory control point and remote storage activities. With this capability, supporting remote storage activities and the inventory control point could monitor and establish periodic classes of programed instruction in order to alleviate known problem areas, (see figure 4 page 68).

Through the use of electronic systems as the International Business Machine Tele-Processing Teaching System, variations offered the students utilizing the computer type program instruction would be: (1) tapewriter teaching stations; (2) typed print-out of questions and answers; (3) steno terminals; and (4) perceptual displays capable of showing from one to one thousand pictures to a student.¹

This system of instruction allows the particular supply instruction monitor at Marine Corps Institute to have immediate results of the student's progress and add additional instruction to the course as the student progresses.

The ability of programed instruction to serve the needs of one individual or large groups of individuals makes it a valuable asset to Marine Corps training in general. Individuals in remote field units can avail themselves to this instruction without having to depend upon the presence of an instructor.

With a continual evaluation and updating of the present system of formal education, and the inclusion of a progressive

¹A. Maker, IBM Research Computer Based Instruction (CBI): Introduction to the IBM Research Project, A Report Prepared for the IBM Corp. by the Thomas J. Watson Research Center (New York: March 6, 1964), p. 6.

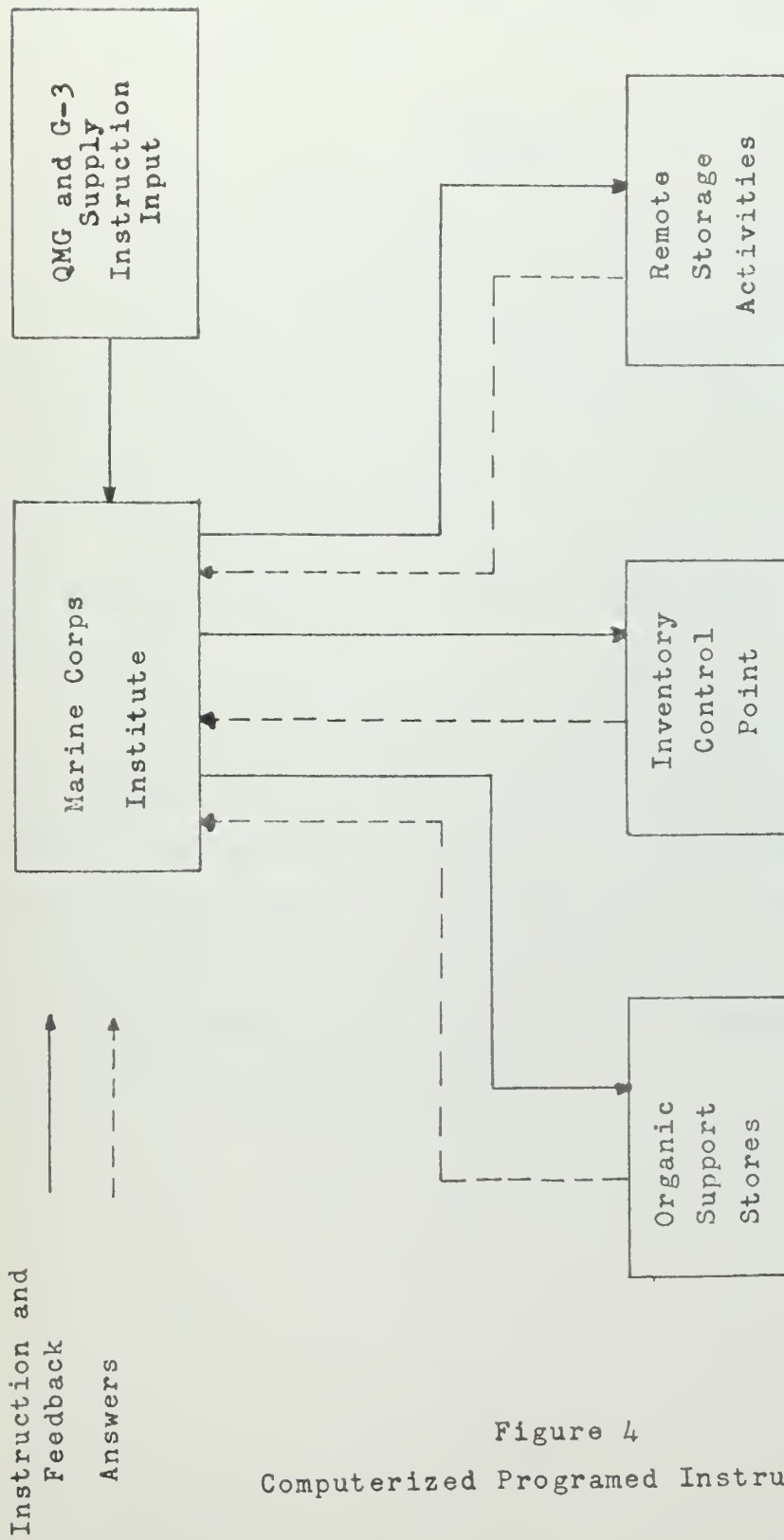


Figure 4
Computerized Programed Instruction

system of programed instruction, the Materiel System can have the highly trained personnel required to supply a Marine Corps that is keeping pace with the dynamic changes in the technology of weapons, war, and peace.

Summary

Present plans in the changeover to the new Materiel System do not include specific changes in formal education to support the system. However, with the basic educational structure presently available, and through timely changes in curricula initiated by the Supply Department it will be possible to keep up with the new Materiel System educational requirements, provided these changes are approved and acted upon by higher headquarters.

The place of computers was not forgotten in the Materiel System organization. Neither should computers be overlooked as a means of fulfilling the educational requirements which the new Materiel System have. It is suggested that careful consideration be given to the potential of the Marine Corps Institute as the best suited organization to provide the programed instruction packages for the Materiel System.

CHAPTER VII

CONCLUSIONS

Military victory depends in large measure on superiority in weapons and equipment. It is obvious that technical superiority without timely availability is useless. It can therefore be said that total superiority includes immediate efficiency and responsiveness of supply. Supply which must be provided via the long supply lines demanded by the global character of the defensive and possible offensive situations which do and may confront the Marine Corps.¹

This quotation, taken from a speech found in the speech files of the Supply Analysis Office at Headquarters Marine Corps, describes the critical position of the Supply System within the total Marine Corps structure.

In order for the Supply System to provide immediate, efficient, and responsive supply support, the historical lag in the educational advancements of the System must not continue.

The success of the future Marine Corps Supply System depends not only on the hard work of the individuals who comprise the System but also on their intelligence and training.

There is a need for specialists throughout the Supply System, as well as a need to provide and train them thoroughly

¹"Marine Corps Supply Department 1959," op. cit.

in management and operating procedures. The System can no longer be run as a "seat of the pants" operation.¹

The reliance on one man (or the long experience and faithful service of a few men) to operate or make timely changes to the rapidly advancing System, is a situation that can no longer be tolerated. A Supply System of automation, operational research, statistics, mathematical concepts, and multi-million dollar inventories cannot operate with personnel such as "on-the-job trained Murphy, a man trained by another numbskull."² A modern Supply System is not the place for individuals who have gained their experience by trial and error or their knowledge by osmosis.³

Such a Supply System must be: supported by the total Marine Corps; sold by the people it is established to support; structured with highly competent, formally educated, career minded, professional personnel; capable of effecting the rapid changes of progress as a total system, not as a structure alone; farsighted so as not to be caught short by the progress of the times; and able to support the finest fighting machine the world has ever seen, the United States Marine.

¹Major General William P. Battell, "Expansion of Technical Training in Occupational Field 30 (Supply)," (An Undated Letter in the Files of the Supply Analysis Office Headquarters, USMC).

²Interview with Major General William P. Battell, op. cit.

³Major General William P. Battell, "Expansion of Technical Training in Occupational Field 30 (Supply)," op. cit.

In order to be supported by the total Marine Corps and sold by the people it supports, the System personnel must never lose sight of their mission of providing adequate timely supply support to the Fleet Marine Force Units.

To enable the System to provide for rapid changes in technology, be farsighted and structured with top quality personnel, a balanced professional training program must be implemented, which includes such aspects as: (1) Broadening the formal and specialized training and educational base through the use of Marine Corps, Department of Defense, other service, and civilian schools, as well as a continual evaluation and updating of curricula; (2) Developing managerial techniques in officer training needed to keep pace with a dynamic System; (3) Scheduling and coordinating formal schooling with career assignments and changes of station; and (4) Assigning personnel by matching job openings with educational background.

With the new Materiel System and a supporting up-to-date education system the Marine Corps can continue to demonstrate its superiority in battle by having the proper equipment at the proper places at the proper time.

BIBLIOGRAPHY

Public Documents

- U.S. Armed Forces Supply Support Center. Report on Management of Electrical and Electronics Material. U.S. Marine Corps, Washington, D.C., 1961.
- U.S. Comptroller General. Report to Congress of the United States: Unsatisfactory Condition of Combat Vehicles and Equipment in the 3rd Marine Division, Okinawa U.S. Marine Corps. Washington, D.C., 1963.
- U.S. Marine Corps. Marine Corps Formal Schools Manual: MCO, P1500.12B. April, 1962.
- U.S. Marine Corps. MOS Manual: NAVMC 1008-PD (Revised 1945 with Change No. 17 of January 1965).
- U.S. National Archives. Folder No. 2385/130-130, Quartermaster, P4. Record of Proceedings of a Board Convened at Headquarters, USMC. Washington, D.C., March 20, 1946.
- U.S. National Archives. Folder No. 2385/130-130, Quartermaster, P5. 2nd Endorsement on Ltr. QMGMC CMC, Serial No. 2. Washington, D.C., April 9, 1946.
- U.S. Department of Navy. Quasi-War with France: Operations Feb., 1797-Oct., 1798. U.S. Government Printing Office, Washington, D.C., 1935.

Books

- Albers, Henry H. Organized Executive Action: Decision-Making, Communications, and Leadership. New York: John Wiley and Sons Inc., 1962.
- Beishline, John Robert. Military Management for National Defense. New York: Prentice-Hall Inc., 1950.
- Furer, Julius Augustus. Administration of the Navy Department in World War II. Washington, D.C.: Department of the Navy, 1959.

Periodicals

- Atherton, Howard P. "Where Marine Equipment Comes From," The Marine Corps Gazette, VIII (December, 1923), 234-40. (A Brief Synopsis of the Organization and Activities of the Depot of Supplies, U.S. Marine Corps, Philadelphia, Pa.)
- Bertotti, J.M. "Business Education: Five Emerging Trends," Management Bulletin No. 34. American Management Association (1963), 29.
- Buckley, Noel. "Programed Learning: Return to Reality," Dun's Review, (May, 1964), 46-129.
- Cook, D.A. "Problems of Training and Retraining: Programed Instruction in Industry." Management Bulletin No. 22, American Management Association (1962), 1.
- Craig, John H. Capt., USMC. "Brigadier General Cyrus S. Radford USMC," The Marine Corps Gazette, XIV (September, 1929), 150-52.
- Dunlap, R.H. Colonel, USMC. "Education in the Marine Corps," The Marine Corps Gazette, X, (December, 1925), 149-56.
- Dyer, Jesse F. Maj., USMC. "Military Schooling in the Marine Corps," The Marine Corps Gazette, VII, (March, 1922) 22-30.
- Hudson, L.C. Lt. Col., USMC. "Combat Headache," The Marine Corps Gazette, XXIX-XXX (June, 1945), 28-30.
- Lejeune, John A. Major General Commandant, USMC. "Preparation," The Marine Corps Gazette, VII, (March, 1922), 53-55.
- Lentz, George. Sgt., USMC. "Quartermaster Sergeants," The Marine Corps Gazette, VIII, (March, 1923), 260-64.
- "Marine Corps Get a New Supply Department," Army Navy Journal, (July 20, 1946), 1385.
- "Marine Corps Supply System," The Review, XLII, (September-October, 1962), 34-109.
- Mason, A.T. Capt., USMC. "The Role of the Marine Corps Schools," The Marine Corps Gazette, XX, (May, 1936), 7-64.

- Metcalf, C.H. Maj., USMC. "A History of the Education of Marine Officers," The Marine Corps Gazette, XX (May, 1936), 15-54.
- Miller, Charles J. "Marine Corps Schools 1934-1935," The Marine Corps Gazette, XIX, (August, 1934), 57-60.
- "New Term at Officer's School," The Leatherneck, III (February, 1920), 1.
- "Note," The Marine Corps Gazette, XVIII, (November, 1934), 43. (Post Graduate Educational Facilities for Marine Officers for the Year 1936-1937.)
- Sanderson, Charles R. Lt. Col., USMC. "The Quartermaster's Department, its Mission and History," The Marine Corps Gazette, XV, (March, 1930), 60-69.
- "Schools for QM Sergeants Opens at Norfolk," Marines Magazine, III (October, 1918), 15-16.
- "Schools for Marines," The Leatherneck, XXX, (March, 1947), 54-58.
- "Special Schools USMC," The Leatherneck, (May, 1940), 22-23.
- Williams, Dion Brigadier General, USMC., Retired. "The Education of a Marine Officer," The Marine Corps Gazette, XVIII, (November, 1934), 24-32. (An Interesting Survey of the History, Management and Curriculum of Three Famous Institutions.)
- Wilson, Ben F. "Marine Corps Service Schools," The Marine Corps Gazette, XXII, (June, 1939), 13.
- Woodhouse, Albert S. "Recorded Programed Instruction," Management Bulletin No. 22, American Management Association, (1962), 33.

Reports

- Maher, A. IBM Research. Computer-Based Instruction (CBI): Introduction to the IBM Research Project, Prepared by Watson Research Center. New York, March, 1964.

Unpublished Material

Allen, Chester R. Major General, USMC. "Remarks Given at a Reserve Officers Association Banquet at Bolling Air Force Base." Washington, D.C., May 28, 1960. (Typewritten.)

_____. "Speech to Field Grade Officers Graduating from Supply School." Camp LeJeune, N. C., August 10, 1962. (Typewritten.)

_____. "Speech to the Graduating Class of the Unit Supply Officers Course." Camp LeJeune, N.C., Undated. (Typewritten.)

_____. "Supply Department Presentation to the General Officers Conference." July 13-15, 1959. (Typewritten.)

Battell, William P. Major General, USMC. "Expansion of Technical Training in Occupational Field 30, (Supply)." Headquarters, USMC., Undated. A letter From the QMG, USMC. to the Assistant Chief of Staff, G-3.

_____. "Speech Given by the QMG to the General Officers Symposium." Headquarters, USMC., 1964. (Typewritten.)

Commandant of the Marine Corps. "CMC Notes: Summary of 3rd. Mar. Div. and GAO Report Regarding Logistic Situation." Headquarters, USMC., February, 1964.

Headquarters Third Marine Division, Reinforced Fleet Marine Force Letter 5741. "GAO Team Audit Findings." Okinawa, 1963. (Photostat.)

Headquarters U.S. Marine Corps. "Marine Corps Unified Material Management System: System Specifications." Washington, D.C., November, 1964.

"Marine Corps Supply Department 1959." Headquarters, USMC., Undated. (Typewritten.)

"Marine Corps Supply System." Headquarters, USMC., November 22, 1955. (Mimeographed.)

Marine Corps Supply Activity Philadelphia, Pa. "Welcome to Marine Corps Supply Activity Philadelphia, Pa." Philadelphia, Pa., Undated.

"Memorandum for the Commandant of the Marine Corps." G-1 Study No. 1-64, Washington, D.C., May 19, 1964.

Riley, Paul H. "Speech to the Participants in the Advanced Material Requirements Course." Air Force Institute of Technology, Air University, January 15, 1959. (Typewritten.)

Sanders, A.S. Col., USMC. Supply Department Organization Speech. 1962 (Typewritten.)

"Training and Education of Supply Personnel, Status of." Headquarters, USMC., 1964, (Typewritten.)

U.S. Marine Corps. "Instructions Regarding Marine Corps Continental Supply System." Letter of Instruction No. 1264. Headquarters, USMC., April 26, 1946.

_____. "Marine Corps Institute Handbook: MCIO P1550-1B." Washington, D.C., March 1, 1963.

_____. "Continental Supply System and Logistical Support for FMF Units Stationed in the United States." A Memorandum for the Commandant of the Marine Corps. Washington, D.C., April 8, 1946.

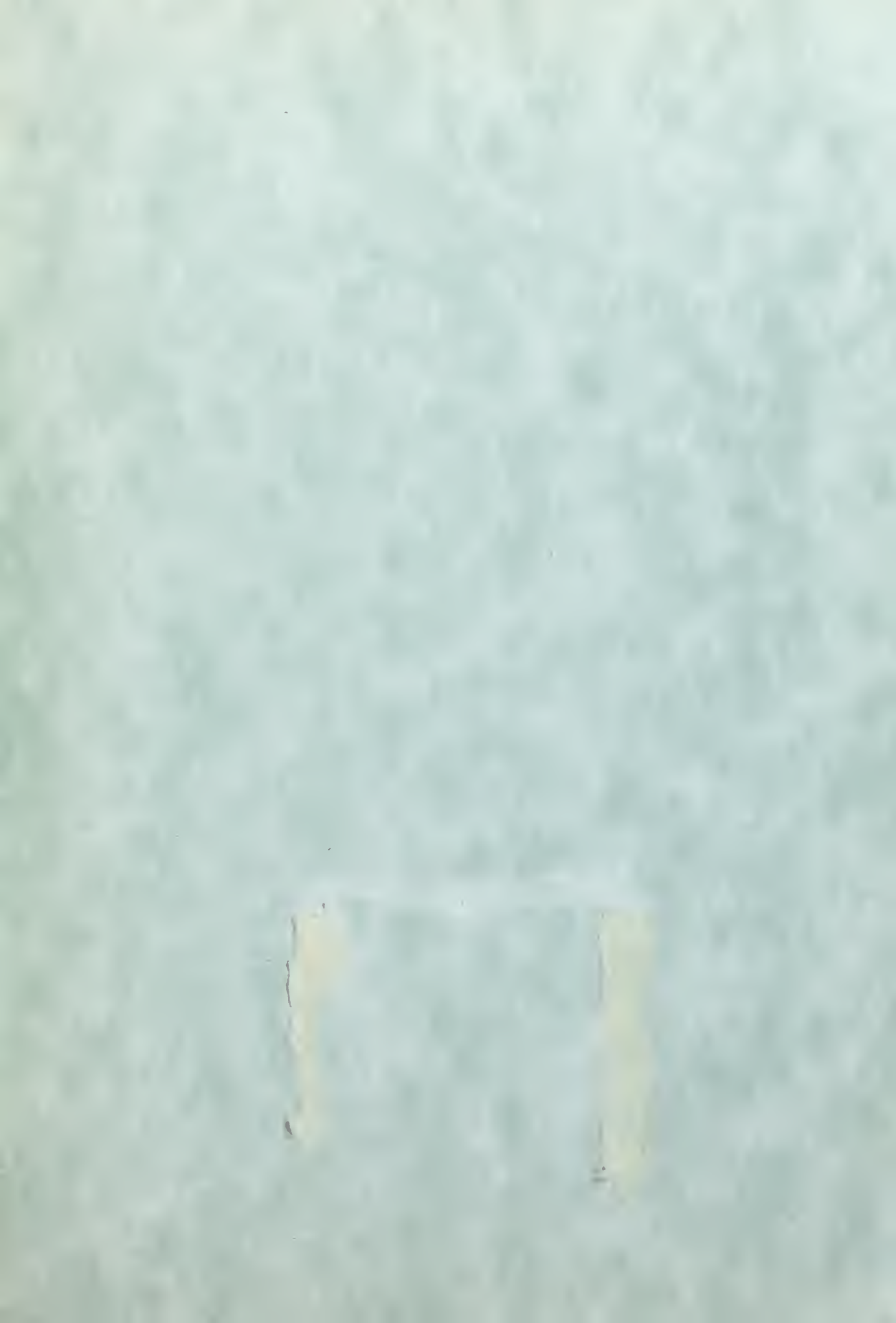
U.S. Marine Corps Supply Department. "Supply Department Study No. 3-1962." Headquarters, USMC., 1962.

_____. "Supply Officer Education Program." A Dept. Study. Headquarters, USMC., 1960.

Other Sources

Headquarters, USMC. Personal Interview with M.H. Forward, Deputy Assistant Quartermaster General USMC. January 8, 1965.

_____. Personal Interview with Major General William P. Battell, Quartermaster General USMC. February 8, 1965.



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